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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,831	03/10/2004	Teruo Shimizu	20154/0200985-US0	5032

7278 7590 03/22/2005

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EXAMINER
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MAI, NGOCLAN THI

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**Application No. 3U

10/798,831

Applicant(s) th

SHIMIZU ET AL.

Examiner

Ngoclan T. Mai

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/10/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanezaki et al. (6,524,365), Kanezaki et al. (US2002/0197149) or Kanezaki et al. (JP 2001-192754) in view of Mori (4,703,076).

Kanezaki et al discloses a bearing for fuel pumps comprising a graphite-dispersed copper-based sintered alloy which contains 10-25 wt.% Ni, 0.1 to 0.9 wt.% P, 1-8 wt.% C, the balance Cu and unavoidable impurities and which has a porosity of 5-25%. See abstract. The difference between the claim and Kanezaki et al is that Kanezaki et al does not teach a fluororesin layer is provided in the external surface of the sintered alloy.

Mori teaches coating and/or impregnating sintered layer of Cu-base alloys with fluorine resin such as tetrafluoroethylene perfluoroalkylvinyl ether copolymer resin (PFA) and tetrafluoroethylene hexafluoropropylene copolymer resin (FEP) and tetrafluoroethylene resin (PTFE) to improve wear resisting properties and friction properties of sliding and bearing material, see col. 2, lines 24-45. Mori also teaches the coating resin having a thickness of 0.01 to 0.03 mm (10-30  $\mu$ m), see co. 6, lines 10-15.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the sintered alloy of Kanezaki et al with the coating composition taught by Mori in order to obtain a bearing having improve wear resisting properties and friction properties. It would also be obvious to coat the sintered alloy of Kanezaki et al with the coating composition and having a thickness (as applied to claim 3) as taught by Mori since such thickness is taught to provide the noted improvement.


With respect to the intended use of the bearing for a motor for pure water as applied to claims 4 and 8, the claimed intended use of the claimed sintered alloy does not lend patentability to the alloy. A mere statement of a new use for an otherwise old or obvious composition cannot render a claim to the composition patentable. See In re Lemin, 51 CCPA 942, 326 F.2d 437, 140 USPQ 273 (1964), In re Thuau 135 F.2d 344, 57 USPQ 324 (CCPA 1943), Ex parte Douros 163 USPQ 667 (POBA), and In re Craige, 188 F.2d 505, 89 USPQ 393 (CCPA 1951).

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoclan T. Mai whose telephone number is (571) 272-1246. The examiner can normally be reached on 9:30-6:00 PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ngoctan T. Mai  
Primary Examiner  
Art Unit 1742

n.m.